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ILLINOIS UNIV AT URBANA DEPT OF PSYCHOLOGY

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ETHNIC AFFIRMATION VERSUS SOCIAL DESIRABILITY AS A DETERMINANT --ETC(U)

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AN EXAMINATION OF HISPANIC AND GENERAL POPULATION
PERCEPTIONS OF ORGANIZATIONAL ENVIRONMENTS
(Harry C. Triandis, Principal Investigator)



DEPARTMENT OF PSYCHOLOGY
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ETHNIC AFFIRMATION VERSUS SOCIAL DESIRABILITY AS A
DETERMINANT OF DISCREPANCIES IN THE RESPONSES OF HISPANIC
BILINGUALS TO SPANISH AND ENGLISH VERSIONS
OF A QUESTIONNAIRE

G. Marín, H. Betancourt, H. C. Triandis, Y. Kashima

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affirmation was measured by checking whether the English responses of the bilinguals were closer to the responses of the monolinguals than were the Spanish responses of the same individuals. In addition, a competing hypothesis was that the English responses will be higher in social desirability than the Spanish responses of the same individuals. Ethnic affirmation was found in Spanish rather than in English--i.e., the Spanish rather than the English response of the bilinguals was closer to the response of the monolinguals. However, the obtained differences between the English and Spanish responses of the bilinguals can best be accounted by the social desirability hypothesis. The study implies that it is preferable to test bilingual subjects in their "mother tongue" since their responses are less socially desirable in that language. The study also suggests that when we find no cultural differences between a bilingual group answering in English and a mainstream group, the lack of differences is in part accounted by the attenuation of the differences resulting from an effort of the bilinguals to give a socially desirable response that looks as "mainstream" as possible.

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Ethnic Affirmation versus Social Desirability as a Determinant
of Discrepancies in the Responses of Hispanic Bilinguals
to Spanish and English Versions of a Questionnaire

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An issue of great concern to cross-cultural researchers is the equivalence of instruments across cultures and across languages. Whether the instrument is applied in the language in which it was originally produced or in a translated version, the researcher is often left with the doubt of whether the responses being measured cross-culturally are valid or if they are due to the subjects differentially responding to two supposedly equivalent stimuli. This can occur when a given stimulus (e.g., a word) has acquired different connotative (affective) meanings within two given cultures/languages. In this case a perfectly well translated instrument that uses words with differential affective meanings in two cultures will provide data that are the results of these different meanings rather than of what the item intended to measure. In cross-cultural research, obtained results may be due to the way language or cultural conventions affect the answers rather than to the content of the questionnaires utilized.

In order to guarantee the equivalence of two linguistic versions of an instrument, various researchers (e.g., Schachter, 1954; Prince & Mombour, 1967) suggested that bilinguals answer both versions with the expectancy that a high positive correlation should result from comparing their answers to the two linguistic versions. The assumption is that bilinguals will provide similar responses to a given stimulus regardless of the language of presentation. Unfortunately, this assumption may not be correct.

One of the first indications of the inaccuracy of the assumption is found

in the study by Ervin (1964a) where she discovered that in responses to TAT cards, French bilinguals (English-French) gave different responses in three test themes depending on the language used. Achievement for example, was common in English while verbal aggression and autonomy themes were more common in French. Indeed, these cultural differences had been expected by Ervin after analyzing anthropological studies on child rearing practices in France and in the United States.

The fact that bilinguals give different responses to a given stimulus depending on the language being used was in part expected from the results of another study by Ervin. In this case (Ervin, 1964b), English-Japanese bilinguals were found to use different concepts in each language when reacting to the same stimulus in a free associations task. Ervin's findings with the TAT were later replicated by Faniband (1976) with English-Hindi bilinguals reacting again to the TAT. Nonetheless, both studies found that some of the predicted cultural differences in responding to the TAT by bilinguals did not emerge.

Studies that compare the responses to one same paper-and-pencil instrument on the part of bilinguals tend to show that language-based differences exist on the patterns of responses. Triandis, Davis, Vassiliou and Nassiakou (Note 1) administered 39 items in Likert format, concerning childrearing practices to 50 bilingual Greek seniors and juniors attending an American school in Athens, Greece. Half of the respondents answered the questions in Greek first and English second, and the other half answered them in the other order. Correlations of the responses of these subjects revealed that the Greek and English responses by the same respondent to the various items correlated from .29 to .91, with a mean of .66 and a median of .69. The low correlations occurred on items that differed in social desirability in Greece and the U.S. For example, punishing a child who throws rocks at a pet, is considered more desirable in the U.S. than in Greece. The correlation between the Greek and English responses

to that item was only .29. The English responses indicated more approval of punishing the child than the Greek responses. Thus, there was a tendency for social desirability to increase the discrepancy between the two languages. Overall, the English responses were more socially desirable than the Greek responses ($p < .006$). Thus, these Greek bilinguals presented the most socially desirable response pattern when answering in a "foreign" language, rather than in their mother tongue.

Other mechanisms for explaining the differences found among bilinguals when answering the same items in their two languages have been suggested. Yang and Bond (1980) proposed that ethnic affirmation could explain their results where Chinese bilinguals responded in a more Chinese direction when answering a questionnaire in English. More recently, Bond and Yang (Note 2) argue that cross-cultural accommodation or the giving of a response that is appropriate in the "other" culture was also a possible explanation. In the latter study, ego-involvement with the particular item was a moderating variable. That is, ethnic affirmation was observed with the more ego-involving (important) items, and cross-cultural accommodation with the less involving.

Ethnic affirmation as well as accommodation is reflected in the Findling (1971) study with Puerto Ricans in New York. Those answering in English were found to show greater future orientation and greater need for affiliation than those subjects responding in Spanish. Language-specific differential responses were also found by Botha (1968) among Lebanese students who answered a values scale in either French, English or Arabic. In this case the language-specific responses were more salient among the French-Arabic bilinguals who learned French by a method that emphasized not just the French language but France's culture than among the English-Arabic bilinguals who learned English by a method that solely emphasized the linguistic characteristics of English. Finally, studies with the Semantic Differential (e.g., Rastogi & Singh, 1976;

Brizuela, 1975; Collado-Herrell, 1976) have also showed differential responses to the same stimulus depending on the language used to elicit the responses. These results with the Semantic Differential seem to be stronger with scales related to the Affective Dimension (Collado-Herrell, 1976; Rastogi & Singh, 1976) and emerge even when scales are independently developed for each language (Brizuela, 1975).

While the bulk of the evidence reviewed so far seems to suggest that the responses an individual gives to a stimulus will vary with the language in which the stimulus or the responses are presented (probably reflecting the linguistic group's culture), there are some studies that do not agree with the above conclusion. Katerberg, Smith and Hoy (1977) in a study with bilingual (English-Spanish) employees of a large retailer in New York and Miami found that their responses did not differ in terms of the language used to answer the instrument. In developing their scale the authors utilized the double translation procedure and adapted the instrument to Puerto Rican (for New York) and Cuban (for Miami) regional linguistic preferences. Shorkey and Whiteman (1978) also found that standard psychological scales (e.g., Lane's Authoritarianism Scale, Schulze's Dogmatism Scale) when appropriately translated and dialectically modified produced no differences in the subject's responses in terms of the language used.

What these studies may be showing is that at least part of the differences observed in the studies reviewed above may be due to problems in the translation of the instruments. For example, Berkanovic (1980) has shown that instruments translated through the double translation procedure show higher reliabilities than those that are translated from the source to the target language directly. Furthermore, few (e.g., Brizuela, 1975) of the studies that report differential responding mention a concern over possible regional differences between the linguistic forms used in the translation and those used by the respondents. The significance of this issue can be seen when translating into Spanish the

word "bus" where depending on the region of Latin America it can take one of four or five different forms. These regional differences have of course been observed in other languages (e.g., England's "lift" and the U.S. "elevator").

But the discrepancies in the results can also be due to other problems in the design of the studies. For example, a number of the studies had one group of subjects answer the instrument in one language while a second group of subjects answered the second linguistic version--making it possible for some individual differences to account for the results obtained (e.g., Botha, 1968; Yang & Bond, 1980). Furthermore, levels of bilingualism were seldom measured since subjects were assumed to be fully bilingual given their ethnicity, place of residence or type of schooling.

The purpose of this study was to test which differences if any, emerged when bilinguals answered two instruments in both of their languages. The instruments included emic and etic items (see below for explanation) and scales that were translated through the double translation procedure, decentered (Werner & Campbell, 1970) and checked for regional variations.

Method

Subjects

Subjects were 60 bilingual (English-Spanish) college students at a large state university in Los Angeles who participated in the experiment as part of their course requirements. Bilingualism was ascertained by the subjects' ability to read and speak English and Spanish with a bilingual experimenter: The researcher talked to the subjects in each language and all participants were asked to read and verbally report the content of various items in a related questionnaire that was presented in both languages. Furthermore, based on Teitelbaum's (1979) findings on the consistency of self-ratings of language proficiency and use, all subjects were asked to rate their perceived ability for speaking, reading and writing Spanish.

In addition, 53 monolingual Juniors and Seniors at a high school in San Juan, Puerto Rico answered the same instrument as the college students but only in Spanish. Their answers were later utilized to establish cultural "anchors" for our data. Finally and in order to ascertain the social desirability of our various items, four Hispanic and four Anglo psychologists were asked to judge each item from "a Hispanic" and "an Anglo" point of view.

Instrument

All subjects answered a 45-minute questionnaire that included two sections. One part consisted of Hispanic "emic" items generated according to procedures outlined by Triandis (1972) that measured familism; supervisor-subordinate expected relationships and desirability associated with each; inter-ethnic (Hispanic-U.S. Mainstream) patterns of relationships in terms of dignity, respect, obedience, and criticisms; and, appropriateness of various body orientations and spacing when individuals interact. These items were developed in the context of another study in order to reflect significant aspects of the subjective culture (Triandis, 1972) of Hispanics in the United States. Some of the items were derived from the anthropological literature although the majority of items were written after analyzing the results of lengthy open-ended interviews with Hispanic and Anglo respondents and subsequent pre-tests with both groups of respondents at a large public university in Los Angeles. The second part of the questionnaire consisted of Hofstede's Values Survey Items (Hofstede, 1980) that have been derived from research conducted in 40 modern nations. Since these items have been used world-wide before they are assumed to be etic.

The subjective culture items were all developed in English and were subsequently translated into Spanish by a bilingual Latin American graduate student in Psychology. The double translation procedure was continued by having

a bilingual-bicultural psychologist translate the Spanish items back into English. This procedure ("back translation") produced fairly similar versions in English. The two linguistic versions were then submitted to a decentering procedure (Werner & Campbell, 1970) with very few changes in the English version being necessitated. Hofstede's (1980) English version of his scale was submitted to similar translation procedures. Both linguistic versions of the instrument were then submitted to a pre-test with Hispanics from various geographical regions in terms of the instruments' linguistic structure and for possible dialectical misunderstandings. Minimal changes were required after this pre-test.

Procedures

Subjects reported individually to the testing site where they were met by a bilingual-bicultural experimenter. Once their bilingualism was tested, each subject was randomly assigned to answer in private one of the two linguistic versions of the instruments (English or Spanish). The second linguistic version of the instruments was answered three to five days later by each subject together with a personal information questionnaire that tapped ethnicity and ethnic identification, language used with parents, and perceived level of proficiency in Spanish.

Results

Social Desirability Estimates

The four Hispanic and four Anglo psychologists (none of them among the writers of this report) indicated how they thought subjects would respond when trying to "make a good impression on Anglo experimenters" and on "Hispanic experimenters." These judgments were extremely similar, so that there was considerable agreement, across the eight psychologists, on whether or not a response is socially desirable.

Similarity of Spanish and English Responses

There was much evidence that the answers given in English by the subjects were not the same as those given in Spanish. One source of evidence was independent factor analyses of the English and Spanish versions. These were done separately for each topical section of the questionnaire. Korth-Tucker coefficients of congruence between the English and Spanish factors reached significance for only one of the eight topic areas. Inspection of eigenvalues resulted in the determination of the number of factors to be extracted. On four of the eight topic areas the Spanish version produced an additional factor, suggesting that the Hispanic bilinguals had more complex cognitive structures when answering in their mother tongue than in English.

When matched t-tests were done on the 175 items on which they were appropriate, 30 were significant at $p < .05$ or better. Table 1 presents these items and shows the means, t-test values and the corresponding probability levels. The majority of the discrepancies between the answers in English and in Spanish were found in those emic items concerned with the meaning of concepts. These items asked for example, how can a "Hispanic show respect" to another Hispanic and listed several behaviors (e.g., treat well, help, listen to what he has to say). respondents were then asked to provide a quantitative estimate, on a 10-point scale, of the likelihood of the various events (1= never, 2= very small chance,...10= always). The other emic items that showed significant discrepancies dealt with how a person shows "dignity," "respect toward parents," "respect toward subordinates" and "respect toward a boss." (See Table 1 for means).

Social Desirability vs Cultural Accentuation

The subjects were divided according to whether they had indicated that they were proud or not proud of being Hispanics. The question used was "How do you feel about being a Hispanic (Latino/Spanish American)?" Response categories included "extremely," "somewhat" and "little" proud and also two categories of "not proud." For each item on which there was a statistically

significant difference between the English and the Spanish responses to the item, we inspected the answers of both the proud and the not proud Hispanic sample to the English as well as the Spanish questionnaire, while taking into account the social desirability level of the item and the responses of the monolinguals. For example, one item asked for estimates (1= never, 10= always) of whether "To show dignity" one "argues with others." The means were as follows: The proud Hispanics had a mean of 3.0 in English and 3.7 in Spanish; the not proud had corresponding means of 3.5 and 4.6. The difference between English and Spanish responses is significant ($p < .004$). The monolinguals had a mean of 3.5 and the item was considered low in social desirability. It would appear, then, that the English responses are more socially desirable than the Spanish.

Some items could be interpreted as showing ethnic affirmation. For example, "To show dignity you respect other people's ideas" was considered highly socially desirable by the psychologists we sampled. The proud Hispanics gave a mean response of 7.6 in English, and 7.9 in Spanish; the not proud Hispanic response means were 7.5 and 8.0. The monolinguals gave a response of 7.5. Assuming that the "real" Hispanic response is the one obtained from the monolinguals, the English responses are closer to the "real", i.e., show ethnic affirmation, particularly since the English response in this case goes against the social desirability hypothesis.

A table was constructed with rows constituted by the items that yielded significant differences between the Spanish and English versions, and columns marking whether the pattern of answers could be best explained by ethnic accentuation in English for the proud and separately for the not proud. If the item showed the effect it was scored +1; if it showed the effect in the opposite direction (i.e. ethnic affirmation in Spanish or social desirability in Spanish) it was scored -1. The binomial test was used to evaluate the

probability of the distribution of the +1 and -1 scores. The results show ethnic affirmation in Spanish (for the proud at $p < .02$; for the not proud at $p < .003$) rather than in English, and social desirability effects in English (for the proud at $p < .01$, and for the not proud, only a trend, at $< .10$).

Thus, with the kinds of questions used in the present study, there is no evidence of ethnic affirmation, but rather social desirability appears to be the basis of the obtained differences between the Spanish and English versions of the questionnaires.

Discussion

Bond and Yang (Note 2) indicate that affirmation or accommodation depends on the ego-involvement of the subjects. Since we obtained strong evidence of affirmation in Spanish rather than English it may be that the items on which we did obtain differences between the Spanish and English questionnaires were not important to the subjects. That seems difficult to believe, however, because the items were among the most central elements of Hispanic culture. Concepts such as dignity, and respect are considered among the most important for Hispanics (Diaz-Royo, Note 3; Fox, 1973; Gillin, 1965; Lauria, 1964; Seda, 1958; Wagenheim, 1970).

The social desirability hypothesis seems to explain the obtained differences between the Spanish and English versions. It would seem important in future research to take that hypothesis into account, and also to collect data from monolinguals, as we did here, to ensure that one has some anchor on what is in fact a culturally "natural" answer.

At this point it seems certain that:

1. Bilinguals differ in their responses when they respond to a questionnaire in their two languages in counter-balanced order.

2. These differences may be due to several factors.

Clearly, the next item on the agenda of this research area should be the

study of why do the bilinguals differ. The present study suggests that social desirability is the explanation. But, we must remember that the differences between Hispanic and Mainstream cultures are relatively small, and the Hispanic and Mainstream psychologists made extremely similar social desirability judgments. The studies by Bond which found ethnic affirmation and accommodation were done with cultural groups that were much more distinct. Thus, at this stage we are unable to state unequivocally that these phenomena can be accounted for by social desirability.

Future research should explore the phenomenon in greater detail, by (1) asking samples of bilinguals to respond so as to make the best possible impression to an experimenter of each culture, as well as without such instructions (six experimental groups), (2) examining in detail the connotations of the words used in each questionnaire. [To achieve such detailed examination one may have to use the strategy of very few "test items" within a questionnaire, which can be examined in great detail (e.g. orders of presentation, context in which they are presented, etc.) to control or eliminate all possible confounds.]

With respect to the methodology of studies of populations that can be studied in either one or another language, it would appear, from the present data, that preference should be given to employing the subjects' "mother tongue." Bilinguals apparently are likely to give more socially desirable responses when answering in their second language. This has now been found twice, for Greek bilinguals as well as Hispanic bilinguals. This may not be sufficient evidence for generalization to all bilinguals but it certainly suggests that caution is needed when working with bilinguals.

With respect to the methodology of the present project which has tested Hispanic and Mainstream recruits, and found much evidence of similarity between them, it suggests that one of the possible explanations of the high levels of

similarity between the Hispanic and the Mainstream recruits is that both attempt to give socially desirable responses, and the Hispanic responses that might have been different from the Mainstream were attenuated by the incremental effort of the Hispanics to give a socially desirable response when answering in English.

Reference Notes

1. Triandis, H. C., Davis, E. E., Vassiliou, V., and Nassiakou, M. Some methodological problems concerning research on negotiations between monolinguals. Technical Report No. 28. Department of Psychology, University of Illinois, Urbana, Ill. 1965.
2. Bond, M. H., and Yang, Kuo-shu. Ethnic affirmation vs cross-cultural accommodation: The variable impact of questionnaire language. Unpublished manuscript, 1981.
3. Diaz-Royo, A. T. Dignidad and respeto: Two core themes in the traditional Puerto Rican family culture. Paper presented at the annual meeting of the American Psychological Association, Chicago, August, 1975.

References

- Berkanovic, E. The effect of inadequate language translation on Hispanics' responses to health surveys. American Journal of Public Health, 1980, 70, 1273-1276.
- Botha, E. Verbally expressed values of bilinguals. Journal of Social Psychology, 1968, 75, 159-164.
- Brizuela, C. S. Semantic differential responses of bilinguals in Argentina, Costa Rica and the United States. Unpublished dissertation, University of Wyoming, 1975. [Dissertation Abstracts International, 1976, 36 (12-B), 6439.]
- Collado-Herrell, L. I. An exploration of affective and cognitive components of bilingualism. Unpublished dissertation, University of Maryland, 1976. [Dissertation Abstracts International, 1976, 37 (6-B), 3044-3045].
- Ervin, S. M. Language and TAT content in bilinguals. Journal of Abnormal and Social Psychology, 1964, 68, 500-507 (a).
- Ervin, S. An analysis of the interaction of language, topic and listener. American Anthropologist, 1964, 66(2), No. 6 (b).
- Faniband, D. K. Effects of coordinate bilingualism on TAT responses. Unpublished dissertation, California School of Professional Psychology, Fresno, 1976. [Dissertation Abstracts International, 1976, 37 (3-B), 1430].
- Findling, J. Bilingual need affiliation and future orientation in extra-group and intra-group domains. In J. A. Fishman, R. L. Cooper & R. Ma. Bilingualism in the barrio. Bloomington, Indiana: Indiana University Press, 1971.
- Fox, G. E. Honor, shame and women's liberation in Cuba: Views of working class emigre men. In A. Pescatello (Ed.) Female and Male in Latin America. Pittsburgh: University of Pittsburgh Press, 1973.

- Gillin, J. Ethos components of modern Latin American culture. In D. Heath & R. Adams (Eds.) Contemporary cultures and societies of Latin America. New York: Random House, 1965.
- Hofstede, G. Culture's consequences. Beverley Hills, Cal.: Sage, 1980.
- Katerberg, R., Smith, F. J., & Hoy, S. Language, time, and person effects on attitude scale translations. Journal of Applied Psychology, 1977, 62, 385-391.
- Lauria, A. Respeto, relaño and interpersonal relations in Puerto Rico. Anthropological Quarterly, 1964, 37, 53-67.
- Prince, R., & Mombour, W. A technique for improving linguistic equivalence in cross-cultural surveys. International Journal of Social Psychiatry, 1967, 13, 229-237.
- Rastogi, K. G., & Singh, L. C. Influence of language and script on affective meaning. Indian Educational Review, 1976, 11, 61-69.
- Schachter, S. Interpretative and methodological problems of replicated research. Journal of Social Issues, 1954, 10(4), 52-60.
- Seda, B. E. The normative patterns of the Puerto Rican family in various situational contexts. Doctoral dissertation. Ann Arbor, Mich.: University Microfilms, 1958.
- Shorkey, C. T., & Whiteman, V. L. Correlations between standard English and dialectical Spanish versions of five personality scales. Psychological Reports, 1978, 43, 910.
- Teitelbaum, H. Unreliability of language background self-ratings of young bilingual children. Child Study Journal, 1979, 9, 51-59.
- Triandis, H. C. The analysis of subjective culture. New York: Wiley, 1972.
- Wagenheim, K. Puerto Rico: A profile. New York: Praeger, 1970.

- Werner, O., & Campbell, D. Translating, working through interpreters, and the problem of decentering. In R. Naroll & R. Cohen (Eds.) A handbook of methods in cultural anthropology. New York: Museum of Natural History, 1970.
- Yang, K-S, & Bond, M. H. Ethnic affirmation by Chinese bilinguals. Journal of Cross-Cultural Psychology, 1980, 11, 411-425.

Footnotes

1. We are grateful to helpful critical comments to an earlier version made by Michael Bond.

Table 1

Items on which there are differences in the responses of bilinguals answering in Spanish versus English.

For a moment think that you are away from home and you get a call informing you that one of the events described below has happened or is about to happen. How much money would be the maximum that you are willing to spend in order to be with your family for each of the following events? Write down a number between 1 and 10 to indicate the weeks' pay you are willing to spend. (If you do not work assume that a week's work is equivalent to \$200.)

<u>Item</u>	<u>Mean in Spanish</u>	<u>Mean in English</u>	<u>Value of t-test</u>	<u>Probability Value of t-test</u>
Your sister is getting married	4.3	4.6	-2.26	.028
<hr/>				
You are talking with your boss about a job-related issue and agree with him/her when he/she is wrong.				
You feel that is undesirable (1) versus desirable (7)	3.8	3.2	2.01	.05
You are talking with your boss about a job-related issue and you are especially polite toward him/her.				
You feel that is unexpected (1) versus expected (7)	5.3	5.8	-2.99	.004
You feel that is undesirable (1) versus desirable (7)	5.1	5.7	-2.13	.038
<hr/>				
You are talking with your co-worker about job related issues and treat him/her by insisting on paying the bill at a restaurant.				
You feel that is unexpected (1) versus expected (7)	4.5	3.8	2.88	.006
<hr/>				
Judged frequency from Never (1) to Always (10) for a particular behavior to occur when the actor, target and setting are specified.				
Actor: Hispanic; Setting: Tries to show dignity toward; Target: Hispanic				
Action: Refuses to be ordered around	5.9	6.6	-2.22	.030
Actor: Hispanic; Setting: Tries to show dignity toward; Target: Hispanic				
Behavior: Respects the other	8.4	8.0	2.22	.030

Table 1 (Cont'd)

Judged frequency from Never (1) to Always (10) for particular behaviors to occur when the actor, target, setting and behavior are specified.

Actor: Hispanic; Setting: Tries to show dignity toward; Target: Hispanic;
Behavior: Does difficult task for the other

Mean in Spanish	Mean in English	Value of t-test	Probability of t-test
5.9	6.7	-2.26	.027

Actor: Hispanic; Setting: Tries to show dignity toward; Target: Anglo
Behavior: Feels proud of own heritage

Mean in Spanish	Mean in English	Value of t-test	Probability of t-test
7.8	8.3	-2.25	.028

Actor: Anglo; Setting: Tries to show dignity toward; Target: Anglo
Behavior: Believes in self (in who he is)

Mean in Spanish	Mean in English	Value of t-test	Probability of t-test
7.7	8.2	-2.07	.043

Actor: Hispanic; Setting: Criticizes; Target: Hispanic
Behavior: Puts down the culture of.

Mean in Spanish	Mean in English	Value of t-test	Probability of t-test
4.2	3.6	2.08	.042

Actor: Anglo; Setting: Criticizes; Target: Hispanic
Behavior: Starts by complimenting.

Mean in Spanish	Mean in English	Value of t-test	Probability of t-test
4.7	4.0	2.46	.017

Actor: Hispanic; Setting: Obeys; Target: Hispanic
Behavior: Is submissive

Mean in Spanish	Mean in English	Value of t-test	Probability of t-test
6.3	5.5	2.69	.009

Actor: Anglo; Setting: Obeys; Target: Hispanic
Behavior: Is submissive

Mean in Spanish	Mean in English	Value of t-test	Probability of t-test
5.2	4.7	2.05	.045

Estimate frequency from Never=1 to Always=10

To show dignity you respect other people's ideas

Mean in Spanish	Mean in English	Value of t-test	Probability of t-test
8.0	7.6	2.38	.021

To show dignity you show concern for others

Mean in Spanish	Mean in English	Value of t-test	Probability of t-test
6.9	7.5	-2.98	.004

To show dignity you act selfishly

Mean in Spanish	Mean in English	Value of t-test	Probability of t-test
3.0	2.3	2.23	.029

To show dignity you do things to the best of your ability

Mean in Spanish	Mean in English	Value of t-test	Probability of t-test
7.3	7.7	-2.50	.015

To show dignity you do not let people step over you

Mean in Spanish	Mean in English	Value of t-test	Probability of t-test
6.9	5.6	2.97	.004

To show dignity you argue with others

Mean in Spanish	Mean in English	Value of t-test	Probability of t-test
4.2	3.2	3.02	.004

To show dignity you act proud of who you are

Mean in Spanish	Mean in English	Value of t-test	Probability of t-test
6.2	7.2	-3.44	.001

Table 1 (Cont'd)

	<u>Mean in</u> <u>Spanish</u>	<u>Mean in</u> <u>English</u>	<u>Value of</u> <u>t-test</u>	<u>Probability</u> <u>of t-test</u>
To show respect toward your subordinates when they work hard	7.8	8.2	-3.03	.004
To show respect toward your subordinates when they are loyal	7.1	8.3	-4.97	.000
To show respect toward your subordinates when they do a good job	7.7	8.0	-2.35	.022
You show respect toward your boss when he trusts you	7.9	8.3	-2.47	.016
You show respect toward your boss when he is bossy	4.4	3.6	2.26	.027
You show respect toward your parents when they order you to do something	6.6	6.0	2.34	.022
You show respect toward your parents when they do something that makes you proud of them	7.6	8.3	-3.29	.002

Please think of an ideal job--disregarding your present job. In choosing an ideal job, how important would it be to you to (please circle one number from 1=of utmost importance to 5=of very little importance).

have little tension and stress on the job.	2.5	2.7	-2.40	.020
live in an area desirable to you and your family.	1.7	1.1	2.99	.004

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